

15080 Mechanical Insulation

Part 1: General

1.01 These standards apply to the insulation of piping, equipment and ductwork

Part 2: Design Guidelines

2.01 Ductwork Insulation

- Acoustic lining should be minimized and is strongly discouraged. Exposed lining downstream of VAV boxes is acceptable provided is it installed with a sheet metal nosing at the leading edge. Exposed edges shall be sealed.
- Exposed ductwork shall have rigid board insulation with factory aluminum vapor barrier and all service jacket.
- Concealed ductwork shall be insulated with a wrap and factory applied vapor barrier. Concealed ducts are considered as installed above ceilings or within chases.
- All outside air intake ducts and plenums which are insulated shall have rigid board insulation.

2.02 Piping Insulation

- Insulation shall be factory molded tubular type with factory applied jacket. Jackets shall be kraft paper “all service” type with fiberglass reinforced foil vapor barrier.
- Direct buried chilled water lines are required to have a bitumen coating prior to insulation.
- Steam line insulation shall be calcium silicate.
- Special finish jackets:
 - a) Mechanical equipment rooms – provide 8 oz./sq. yd glass cloth jacket with two coats
 - b) Exterior locations – provide .016” plain aluminum jacket with SS bands
 - c) Finished areas – PVC jacket
- Insulation shall be continuous through pipe sleeves.
- Underground chilled water piping is not insulated.